OIPE JC105
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PATENT & TRADEMARK OFFICE

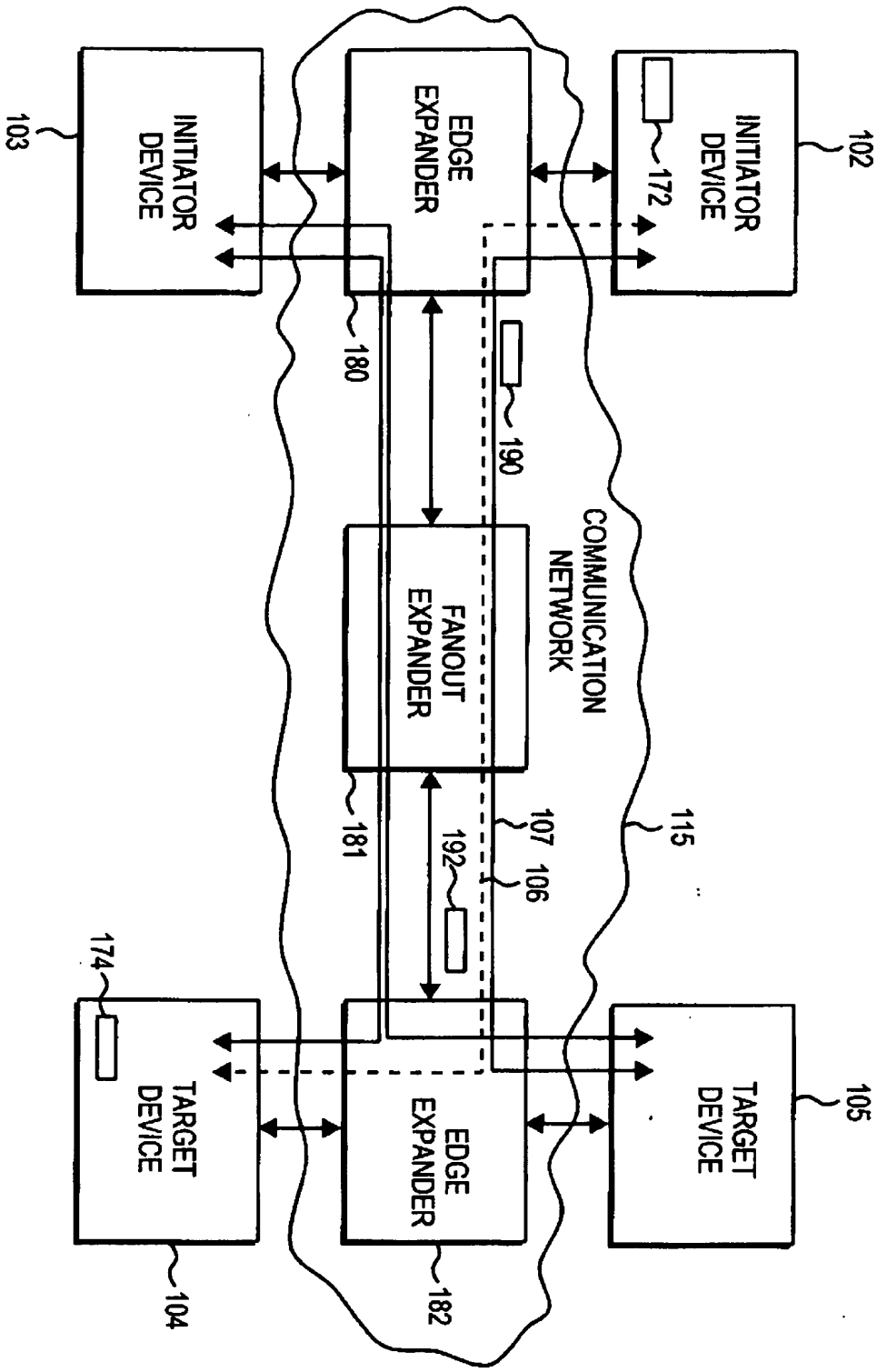


FIG. 1

FIG. 2

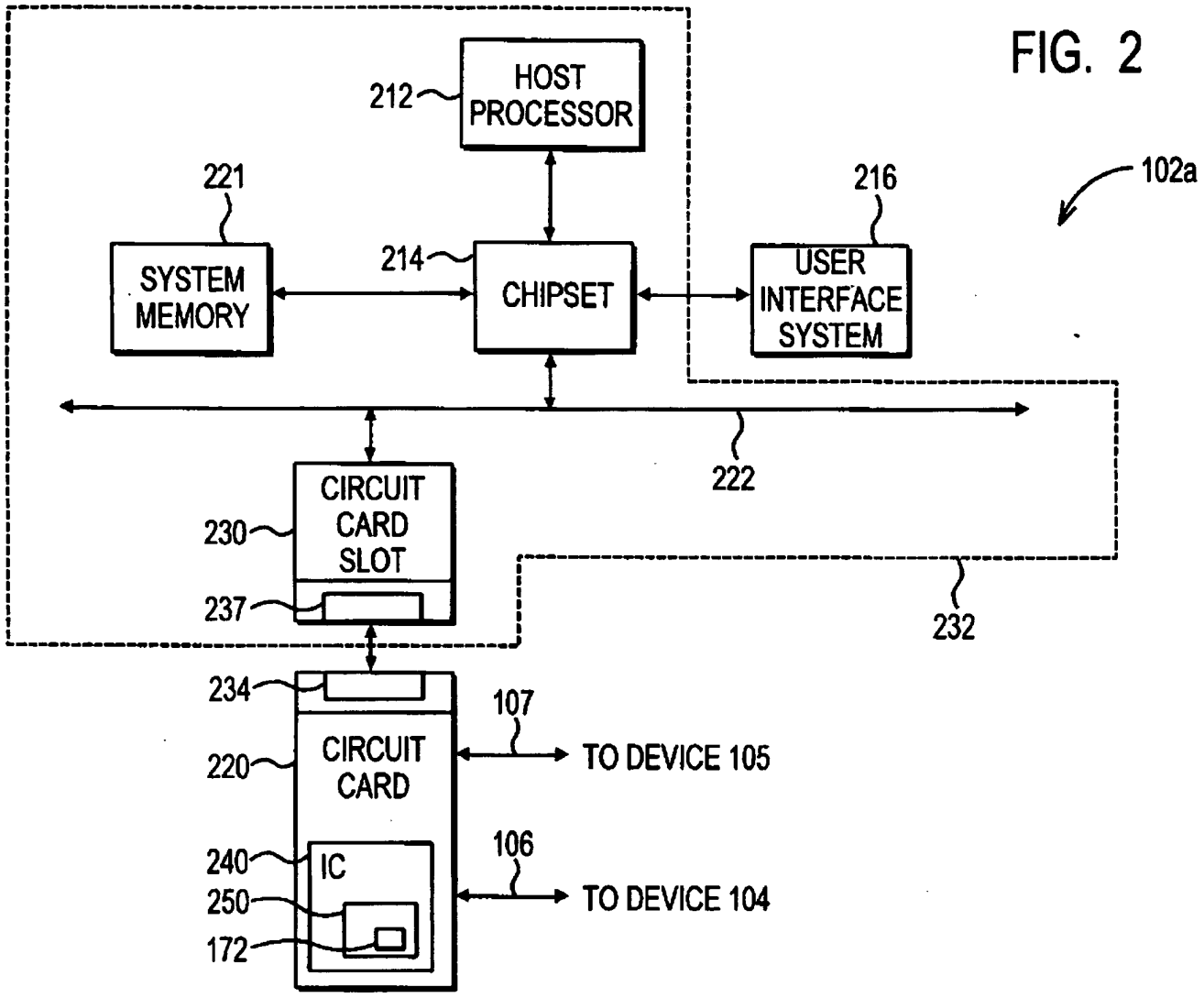

212
HOST PROCESSOR
221
216
102a
SYSTEM MEMORY
214
CHIPSET
USER INTERFACE SYSTEM
222
230
CIRCUIT CARD SLOT
237
232
234
107
CIRCUIT CARD
220
TO DEVICE 105
240
IC
106
250
TO DEVICE 104
172

FIG. 3

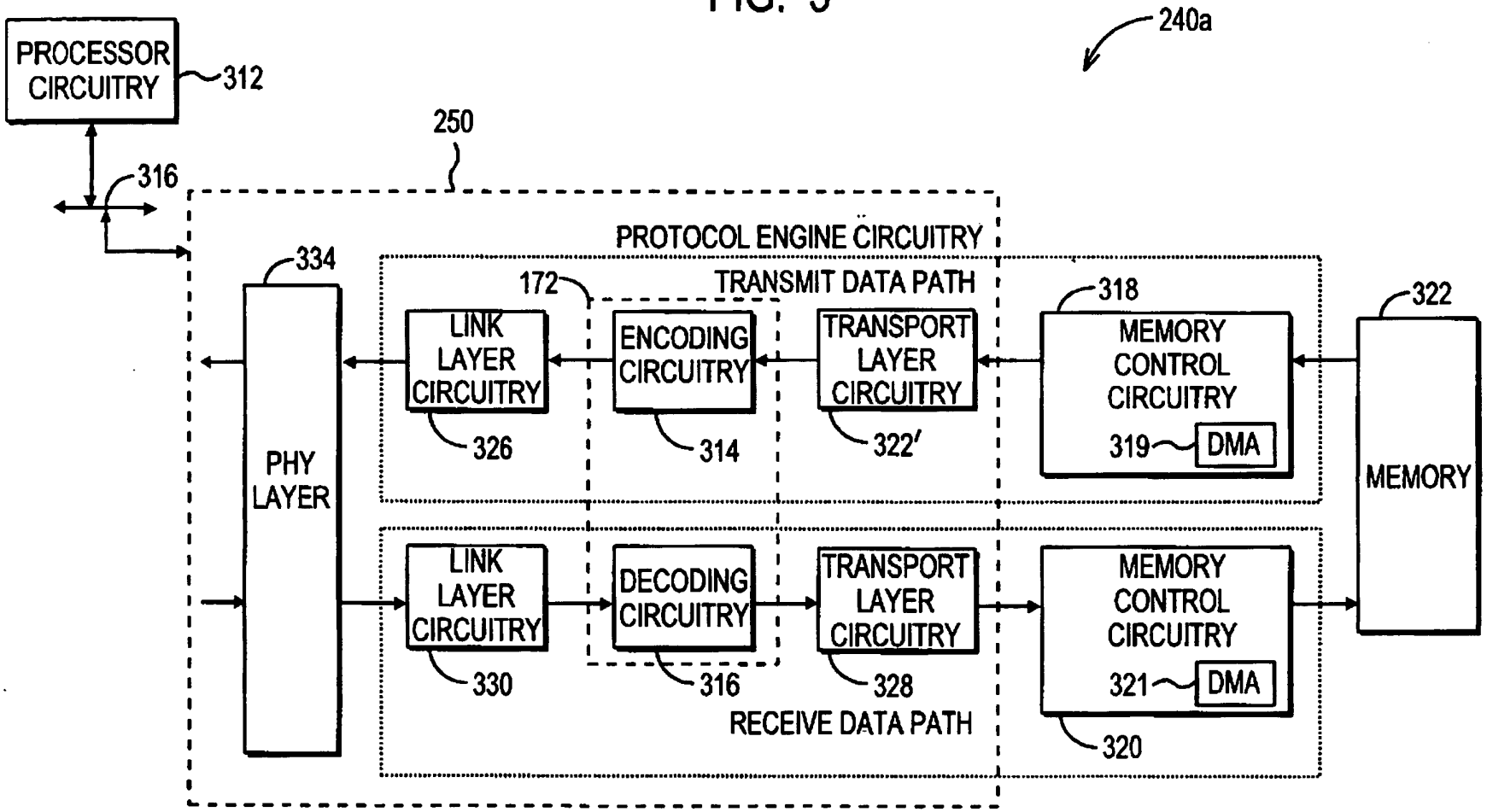

240a
PROCESSOR CIRCUITRY
312
250
316
PROTOCOL ENGINE CIRCUITRY
334
172
TRANSMIT DATA PATH
318
322
LINK LAYER CIRCUITRY
ENCODING CIRCUITRY
TRANSPORT LAYER CIRCUITRY
MEMORY CONTROL CIRCUITRY
MEMORY
326
314
322'
319
DMA
PHY LAYER
LINK LAYER CIRCUITRY
DECODING CIRCUITRY
TRANSPORT LAYER CIRCUITRY
MEMORY CONTROL CIRCUITRY
330
316
328
321
DMA
RECEIVE DATA PATH
320

FIG. 4A

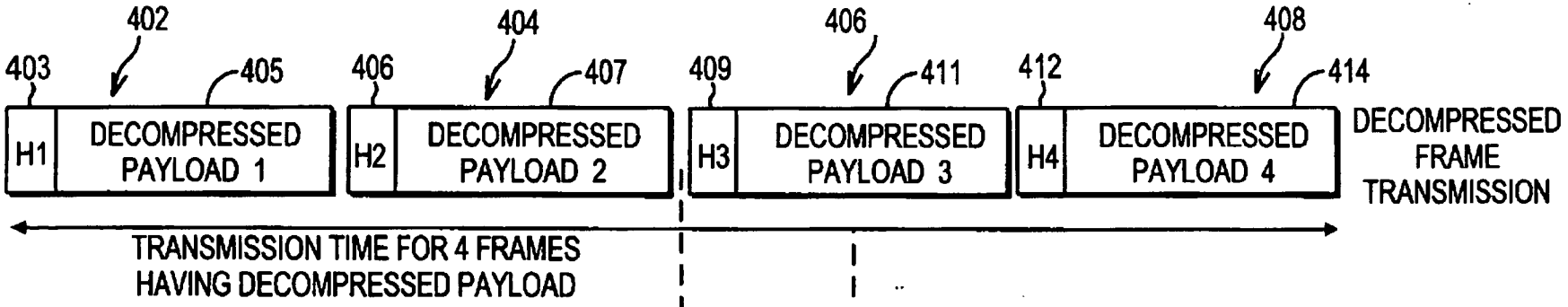


FIG. 4B

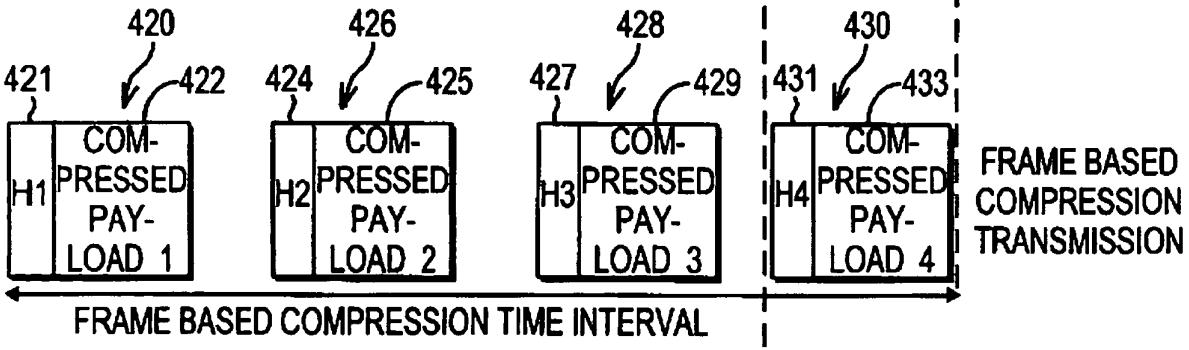


FIG. 4C

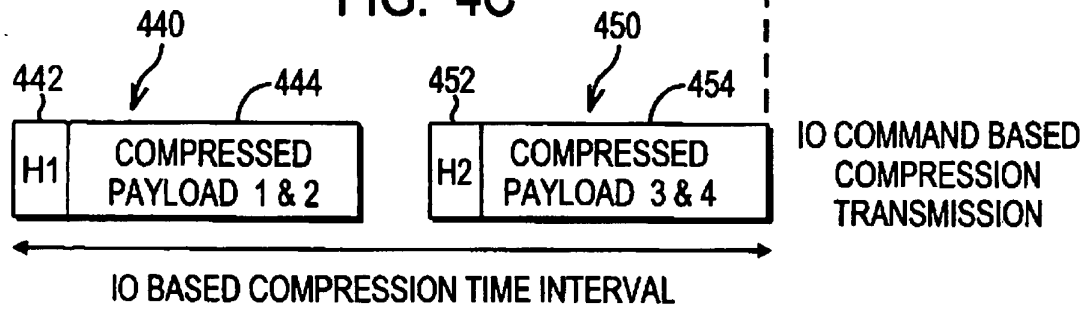


FIG. 5

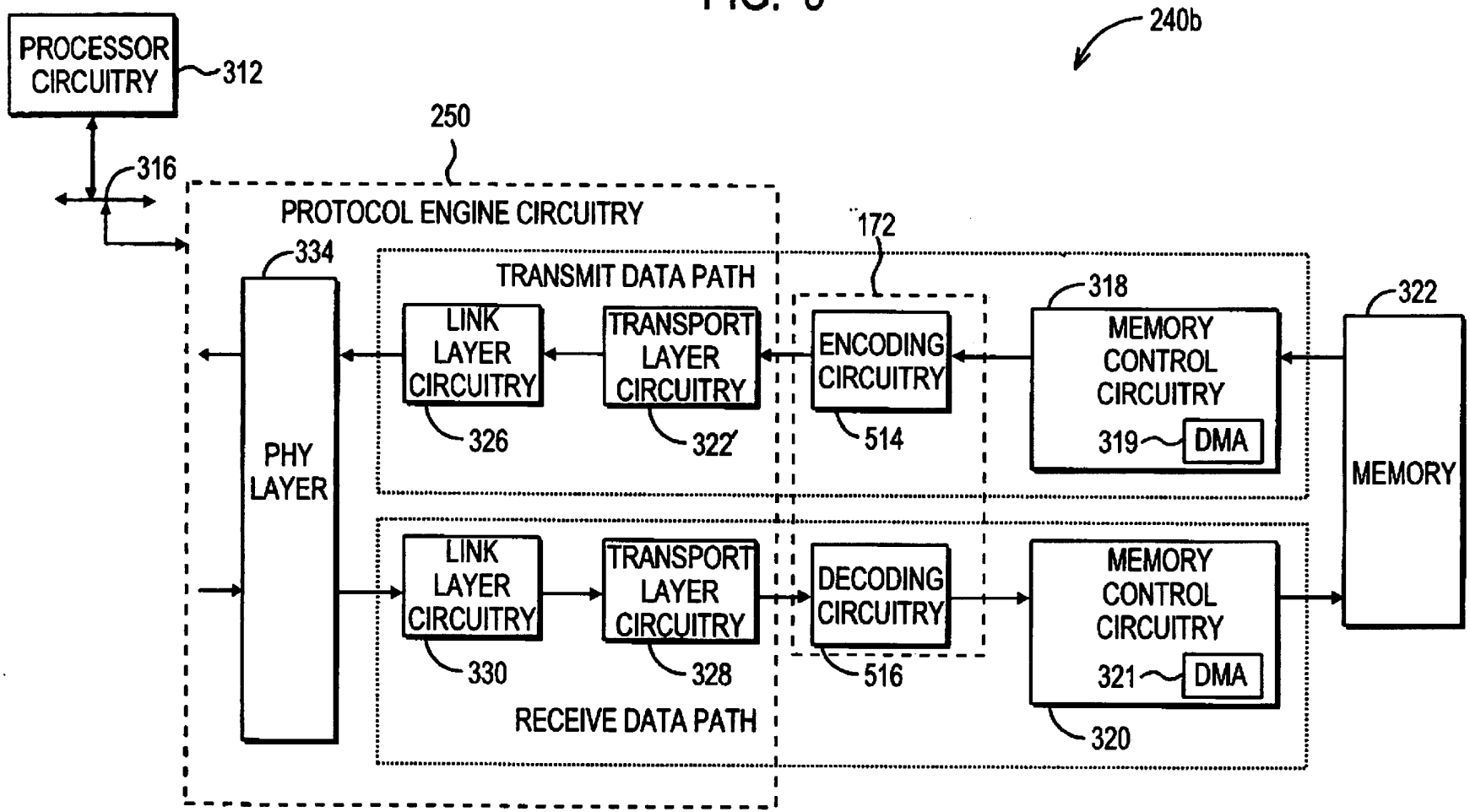
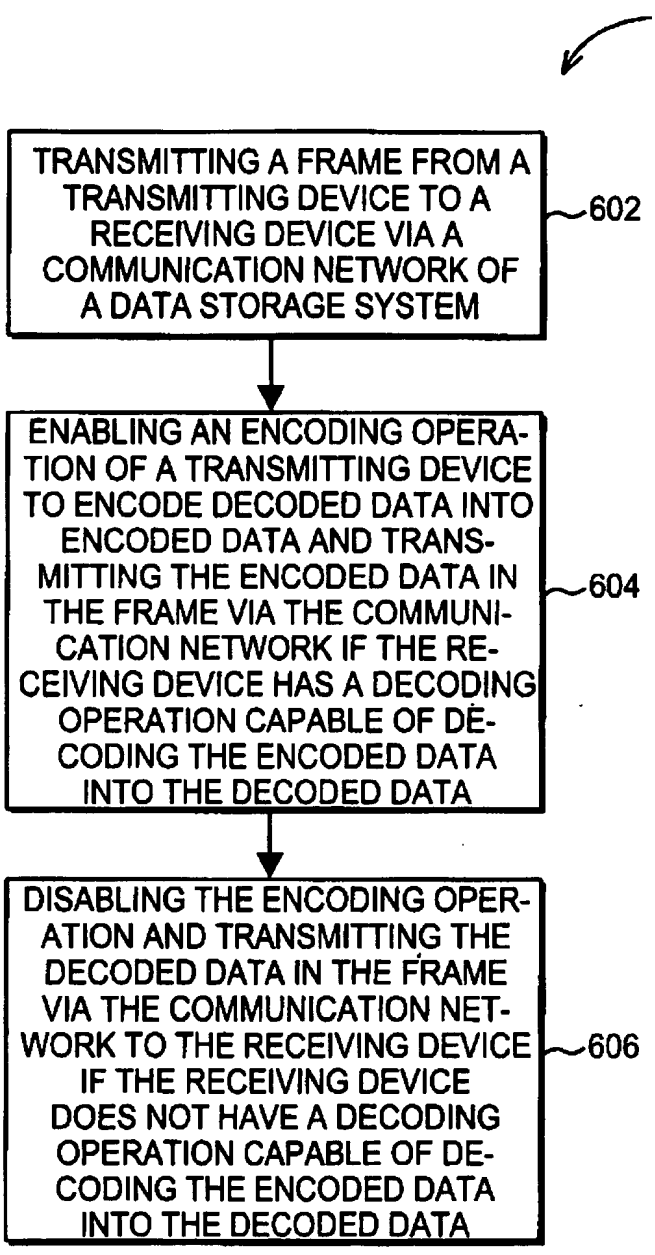

240b
PROCESSOR CIRCUITRY
312
250
316
PROTOCOL ENGINE CIRCUITRY
334
172
TRANSMIT DATA PATH
318
322
LINK LAYER CIRCUITRY
TRANSPORT LAYER CIRCUITRY
ENCODING CIRCUITRY
MEMORY CONTROL CIRCUITRY
PHY LAYER
326
322'
514
319
DMA
MEMORY
LINK LAYER CIRCUITRY
TRANSPORT LAYER CIRCUITRY
DECODING CIRCUITRY
MEMORY CONTROL CIRCUITRY
330
328
516
321
DMA
RECEIVE DATA PATH
320

FIG. 6


600
TRANSMITTING A FRAME FROM A TRANSMITTING DEVICE TO A RECEIVING DEVICE VIA A COMMUNICATION NETWORK OF A DATA STORAGE SYSTEM
602
ENABLING AN ENCODING OPERATION OF A TRANSMITTING DEVICE TO ENCODE DECODED DATA INTO ENCODED DATA AND TRANSMITTING THE ENCODED DATA IN THE FRAME VIA THE COMMUNICATION NETWORK IF THE RECEIVING DEVICE HAS A DECODING OPERATION CAPABLE OF DECODING THE ENCODED DATA INTO THE DECODED DATA
604
DISABLING THE ENCODING OPERATION AND TRANSMITTING THE DECODED DATA IN THE FRAME VIA THE COMMUNICATION NETWORK TO THE RECEIVING DEVICE IF THE RECEIVING DEVICE DOES NOT HAVE A DECODING OPERATION CAPABLE OF DECODING THE ENCODED DATA INTO THE DECODED DATA
606